

Title (en)

METHOD FOR DETERMINING PHASE-CORRECTED AMPLITUDES IN NMR RELAXOMETRIC IMAGING

Title (de)

VERFAHREN ZUR BESTIMMUNG VON PHASENKORRIGIERTEN AMPLITUDEN BEI DER RELAXOMETRISCHEN NMR-BILDGEBUNG

Title (fr)

PROCÉDÉ POUR DÉTERMINER LES AMPLITUDES CORRIGÉES EN PHASE DANS UNE IMAGERIE RELAXOMÉTRIQUE

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Application

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Abstract (en)

[origin: EP1972957A1] Accurate determinations of the NMR spin-spin relaxation parameters provided by multiple echoes imaging experiments (MSME) require first of all phase corrected amplitudes to deal with. The invention relates to a simple and robust algorithm for the phase correction procedure, to be applied following FFT reconstruction and prior to any fitting decay method. The algorithm is a pixel-by-pixel algorithm comprising the steps of determining a linear fit from complex amplitude values, defining a rotation angle with respect to the real axis, optimizing the angle, and applying a rotation to the amplitudes of the considered pixel through all echo images. The algorithm provides phase corrected amplitudes for real-phased images, allowing correct image algebra and measurements for T2 constants from any specific ROI on the image.

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